

CHAPTER 10

NAVAL EDUCATIONAL INSTITUTIONS

LEARNING OBJECTIVES

Upon completion of this chapter, you should be able to do the following:

1. Describe the historical foundation of the U.S. Naval Academy.
2. Describe the appointment process to the Naval Academy.
3. Identify the eligibility criteria for appointment to the Naval Academy.
4. Identify the eligibility requirements for entering the NROTC Program.
5. Describe the NROTC organization on the college campus.
6. Identify the purpose and curriculum of Officer Candidate School.
7. Identify the purpose and curriculum of Aviation Officer Candidate School.
8. Identify the purpose and curriculum of the Naval Postgraduate School.
9. List the degrees offered by the Uniformed Services University of the Health Sciences.
10. Identify the mission and historical foundation of the Naval War College.

Career Navy officers who, after being commissioned, feel that their academic life is over are sadly mistaken. Formal education is a recurring part of their entire career. The use officers make of it determines to a great measure their success.

The Navy places importance on formal officer education for two primary reasons. First, the overall mission of the Navy and the personnel needed to accomplish this mission have increased tremendously in scope and complexity. Therefore, the Navy must thoroughly train the people primarily responsible for this mission. The second—and equally important—reason is that every career officer's eventual aim is to command. Succession to command presumes a sound knowledge of the operations of the unit to be commanded.

In this chapter we will look at some of the educational institutions used to train naval officers. We will discuss both commissioning source schools and continuing education schools

You may have the opportunity to attend some of these schools during your naval career.

UNITED STATES NAVAL ACADEMY

SIGNIFICANT DATES

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| 10 Dec. 1815 | Navy establishes school for its officers. |
| 10 Oct. 1845 | The Naval School opens at Annapolis, Maryland (now the Naval Academy). |
| 11 Jul. 1846 | First Naval Academy graduate, Richmond Aulick, receives commission as a passed midshipman. |
| 5 Feb. 1852 | Navy dedicates chapel built at Annapolis, Maryland; first to be built on Navy property. |

- 5 May 1861 Naval Academy transfers to Newport, Rhode Island; returns to Annapolis, Maryland, on 9 August 1865.
- 11 Sep. 1872 James Henry Conyers, first black midshipman, enters Naval Academy.
- 26 Jun. 1884 Congress authorizes commissioning of Naval Academy graduates as ensigns.
- 29 Nov. 1890 Navy beats Army 24-0 in first Army-Navy football game.
- 2 Apr. 1898 Naval Academy adopts coat of arms.
- 3 Jun. 1949 The Naval Academy graduates its first black, John Wesley Brown.
- 28 May 1980 Naval Academy graduates its first women officers.

During the first 50 years of the United States Navy's existence, it had no organized, efficient Navywide system for training its prospective officers. Midshipmen received most of their training aboard ship under the ship's chaplain. They received some training, however, from time to time at various schools ashore.

Despite growing evidence of the need for a naval academy, efforts to establish it were rebuffed until 1845. At that time the Honorable George Bancroft, distinguished historian and educator, became Secretary of the Navy in President Polk's cabinet. With the establishment of a naval academy in mind, Secretary Bancroft made several adroit moves, including obtaining Fort Severn from the War Department. Fort Severn occupied 10 acres on a neck of land called Windmill Point at Annapolis. There, in late 1845, he set up a naval school for midshipmen. The school was officially designated as the United States Naval Academy some 5 years later.

Under Commander Franklin Buchanan, its first superintendent, the new school got under way on 10 October 1845. The original seven-member faculty consisted of four officers and three civilians.

The school opened with a student body of 60, whose members were divided into a junior and senior class. They were housed in several small buildings, popularly named Apollo Row,

Rowdy Row, the Gas House, Brandywine Cottage, and the Abbey. The names of the buildings reflected the principal characteristics of their residents or, in the case of Brandywine Cottage, the ship from which the residents came. The subjects studied included gunnery, naval tactics, engineering, chemistry, mathematics, astronomy, French, and English.

Some of the students had come to the new school without any previous sea duty and were designated "acting midshipmen." Most students, however, had appointments as midshipmen and had several years of sea duty. (The acting midshipmen were more comparable to today's midshipmen than the latter.)

During the first few years, many of the midshipmen had difficulty taking their studies or the school discipline seriously. This difficulty probably resulted because of their previous sea duty experience, their ages (ranging up to 27 years), and their being used to unrestricted liberty when ashore. This is reflected by the following reportedly true stories.

One incident concerned the midshipmen living at the Abbey, who supposedly led exemplary lives. One night, however, the officer of the day found the Abbey deserted. Upon investigation the officer discovered a tunnel that went under the yard wall immediately adjacent to and toward Annapolis. The next day the school ended the use of the Abbey as a midshipmen's residence.

On another occasion, the midshipmen were reported to have hung Professor Henry H. Lockwood in effigy from the Academy flagstaff one St. Patrick's Day. For this, the ringleaders were ordered to appear before a court-martial board for insulting a superior officer. They claimed in defense the professor was not superior to students since he was not an officer. (Congress eventually remedied this situation by raising instructors to the equivalent ranks of officers.)

Another story about this period deals with the linguistic prowess shown by one Midshipman Nelson during the annual examinations. Professor Arsene Girault, instructor in French, had patiently tried to teach Nelson to speak something resembling that language. When time for the exam arrived, however, Nelson knew he could do nothing of the kind. Therefore, he memorized a series of phrases out of the French textbook.

During the examination, with half a dozen commodores present, the Professor, speaking in French, asked, "Mr. Nelson, what is your native state?"

Nelson, not understanding a word of the question, replied with one of his memorized phrases, "Thank You, I am very well. "

The startled Professor glared at him and continued, "What course have you just finished?"

"I am 24 years of age," replied Nelson.

One of the commodores present during the examination was Commodore Matthew C. Perry, who did not understand a word of French. As the situation reached an impasse, Commodore Perry arose from his seat and congratulated Girault on his success in teaching the midshipman to speak French with such fluency and accuracy.

Initially the course of study at the Academy took 5 years. Of these, midshipmen spent only the first and last at Annapolis; they spent the intervening 3 years at sea. During 1850 and 1851 the school was reorganized as the U.S. Naval Academy, and the course of study was changed to 4 consecutive years. Summer practice cruises replaced the omitted sea service. Thus, today's basic 4-year curriculum first appeared at the Naval Academy over 100 years ago, long before it became general practice in American undergraduate education.

With the reorganization that changed the Naval School to the Naval Academy, the school's executive officer became the commandant of midshipmen. The school also adopted a naval uniform for acting midshipmen and inaugurated the marking scale of 4.0.

The reorganization also provided that the holder of a certificate of graduation was entitled to a midshipman's warrant. After 2 years of sea duty, the midshipman could return for an examination for lieutenant. Only Naval Academy graduates were to receive the warrants—the first step toward regulating the quality and quantity of officers in the fleet.

In 1851 the method of appointing midshipmen in proportion to the members of the House of Representatives was established. In 1852 the proviso requiring an Academy aspirant to receive the recommendation of his Congressman was added.

In 1855 the original "fourth class" entered the academy. Almost simultaneously the "my plebe" tradition developed. With this tradition the new third classmen selected particular members of the incoming class over whom they kept a watchful eye. This eventually became a first classman privilege. Until the advent of the squad system in 1965, the closest relationship at the Naval Academy was between the first classmen and the plebes.

Attrition during the early years was heavy. Only 269 midshipmen of the first 1,209 completed the course of study. George Dewey entered with a class of 75; after their annual examination in June 1855, only 38 were retained. Of these, the future hero of Manila Bay ranked 35th! At graduation, however, he ranked fifth in his class of 15.

The 1850s also saw two other firsts at the Academy. Franklin Pierce became the first President of the United States to visit the Academy when he attended a naval ball therein 1856. Two years later the school's first literary society was formed. It honored James Lawrence, whose words, "Don't give up the ship!" adorn Memorial Hall.

The coming of the Civil War brought the young school trying years in 1860 and 1861. As states seceded from the Union, the tension mounted. Finally, one day in April 1861, all hands were ordered to muster aboard the *Constitution*, the school ship. Lieutenant Christopher R. P. Rogers, commandant of midshipmen, addressed the group and ordered all those who desired to resign to fall out of ranks. Many did and, amid sad farewells, went off to join the Confederacy.

Officers at the Academy also went their respective ways, including the brothers William and Foxhall Parker. William had argued they should remain with the Union because of education and Navy ties; Foxhall argued for the Confederacy because of family and state connections. They separated after their discussion; but each had been so persuasive that, unknown to each other, William resigned and Foxhall remained with the Union.

The rapidly expanding Union Navy urgently needed junior officers. Therefore, the first, second, and third class midshipmen who remained at the Academy were sent off to war. Shortly thereafter the fourth class, aboard the *Constitution*, sailed for Newport, Rhode Island, which became the home of the Academy for the duration of the War.

Organized athletics were introduced to the Academy during the post-Civil War period. In 1867 the Academy formed class baseball teams and held the first of a series of annual Thanksgiving athletic carnivals. The athletic program included track and field competition, baseball, rowing, and gymnastics. In 1870 the Academy began competing against outside crews in rowing. Football was being played at the Academy by 1880; and in 1882 the school's football team played its first outside game, defeating

the Clifton Football Club of Baltimore 8-0. Eight years later came the first football game between Annapolis and West Point, with the Navy winning 24-0.

The Naval Academy Athletic Association was founded in 1892, and in 1894 Walter B. Izard of the Academy set a new world record for the 50-yard swim.

Following the Spanish-American War, an extensive building program began. Under this program, nearly all the existing buildings at the Academy were eventually replaced with the French Renaissance-style buildings that stand today. The first steps toward this program began in 1895 when the Academy's buildings were condemned as a menace to health and safety. Following this, Colonel Robert Means Thompson, class of 1868 and a member of the Board of Visitors, engaged a noted architect named Ernest Flagg. Flagg drew a plan for new buildings as well as a completely new arrangement of the yard. Congress approved, and in 1899 the architect's plans began to be carried out.

By this time, the original 10-acre yard had been expanded greatly through various acquisitions (fig. 10-1). The mansion and gardens of the Governor of Maryland were purchased in 1866, and 10 acres were purchased from St. John's College a year later. In 1868 the 65 acres now occupied by the Naval Academy cemetery and the naval hospital were purchased. More land was needed, however, and most of this was provided by the mud dredged out of Chesapeake Bay.

During the early 1900s, a number of buildings were completed under the new plan. Dahlgren Hall and MacDonough Hall were completed in 1903; Isherwood Hall and the officer's club in 1905; and Bancroft Hall in 1906. The Administration Building, Mahan Hall, Sampson Hall, and Maury Hall were completed in 1907.

Bancroft Hall, built as the dormitory for all midshipmen, is the main building at the Academy. Six wings have been added to the building since 1906 to keep pace with the brigade expansion. Within Bancroft Hall is Memorial Hall, which pays tribute to American naval heroes. Its most



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Figure 10-1.-An aerial view of the U.S. Naval Academy.

stirring exhibit is the faded blue flag on which is sewn in uneven white letters the undying words of Captain James Lawrence, "Don't give up the ship."

The Naval Academy Chapel, with its great dome that dominates the yard, was completed in 1908. One striking feature of the chapel is the stained-glass windows. Of these, the three main windows are memorials to Admirals Porter and Farragut and Rear Admiral Sampson. The two flanking windows portray the mission of the chapel. One shows Sir Galahad with his sheathed sword before him. The other portrays Christ showing a newly commissioned ensign the beacon he must follow as an officer. The bronze doors of the chapel, another of its noteworthy features, were the gifts of Colonel Robert Means Thompson.

The original chapel was constructed in the form of a Greek cross. In 1939 an extension was added to increase its capacity, which changed the construction to the form of a Christian cross. Another notable feature of the chapel is the votive ship that hangs from a chain in the arch of the nave. It was presented to the Academy in 1941 by alumni who had served in the Construction Corps. (The idea of exhibiting a ship model in a church goes back to ancient days. The model symbolizes the dedication of seafaring men to their God.)

Beneath the chapel lies the crypt containing the sarcophagus (marble coffin) of John Paul Jones. Completed in 1913, the sarcophagus is surrounded by eight columns of Pyrenean marble. Inlaid in a circle in the marble floor around it are the names of the seven ships Jones commanded or captured during the revolutionary war: *Serapis*, *Alliance*, *Providence*, *Bonhomme Richard*, *Alfred*, *Ariel*, and *Ranger*.

Until brought to Annapolis in 1905, Jones' remains had been in France since his death over a century before. The reinterment in 1906 was one of the most impressive ceremonies in the Academy's history. For the occasion a large crowd filled Dahlgren Hall to honor the memory of the "Father of the American Navy" and to hear President Theodore Roosevelt. The President closed the day with these ringing words, "The man who never surrenders never has to make excuses!"

Attending the Academy during this period of growth were several midshipmen who later led the Navy during World War II, the period of the Navy's greatest expansion. Among them were Ernest F. King, William F. Halsey, Chester

Nimitz, Raymond Spruance, Harold R. Stark, Richmond K. Turner, and Marc A. Mitscher.

An important change at the Academy at this time concerned the summer practice cruises. Ever since 1851 these cruises had normally taken place in practice ships assigned to the Academy. These included such famous sailing ships as the *Constitution* and the *Constellation* and the last square rigger built (1900) for the U.S. Navy, the *Chesapeake*. In 1904, however, part of the midshipmen embarked in the coast squadron of the North Atlantic Fleet. This procedure was repeated yearly until 1912. At that time the Navy began the present system of holding summer practice cruises only in ships of the fleet.

An act of Congress in 1902 restored to Academy students the nautical title "midshipmen." They had been given this title from 1862 to 1870 and are called by this title today. (From 1845 to 1862 they had been called "acting midshipmen on probation"; from 1870 to 1882, "cadet midshipmen"; and from 1882 to 1902, "naval cadets.")

In 1898 the Academy adopted a coat of arms. The coat of arms consists of a trident, the motto "Ex Scientia Tridens," a book, and a shield exhibiting a Roman galley coming bows on into action. The trident is the ancient symbol of sea power. The motto "EX Scientia Tridens," which means "From knowledge, sea power," represents the purpose of the Academy. The book depicts scholastic ideas.

In 1907 the Academy's bandmaster, Lieutenant Charles A. Zimmerman, and a choir member, Midshipman First Class Alfred H. Miles, composed the Navy's battle song, "Anchors Aweigh." The midshipmen first sang it at the Army-Navy football game in 1907 as the Navy won its second successive victory over West Point.

During this period the Academy strived to develop its midshipmen into gentlemen with the strictest sense of dignity and honor. A regulation about dancing serves as an example of the close attention the Academy gave to this task. This regulation, formulated in 1913 by the Department of Discipline (the forerunner of today's Executive Department), presented the following restrictions:

1. None of the modern dances will be performed under any circumstances.
2. Midshipmen must keep their left arm straight during all dances.
3. A space of 3 inches must be kept between the dancing couple.

4. Midshipmen must not take their partner's arm under any circumstances.
5. Midshipmen will not leave the ballroom floor until the dance has been completed and all officers and their guests have left.

The Department of Discipline also strictly regulated smoking. For many years, midshipmen were not permitted to smoke in their rooms. Later, first classmen were given the privilege of keeping their smoking articles in Recreation Hall; there they could gather after dinner to smoke and talk. The custom gave Recreation Hall its more popular name "Smoke Hall."

A significant and colorful event in the life of a midshipman—the Ring Dance—had its origin in the 1920s. For some time first classmen had observed the custom of throwing second classmen into Dewey Basin as soon as the latter had become eligible to wear their class rings. (They became eligible to wear their class rings after passing their final exams for the year.) In 1924 this custom resulted in the tragic drowning of a second classman, so it was replaced by the Ring Dance.

The Ring Dance has several special features. One is the Ring Dance Dinner, the only occasion when midshipmen may entertain their ladies at dinner in the mess hall. The most important feature, however, is the presentation of the rings. At the scene of the dance, on a carpeted dais, stands a huge golden ring modeled after the class ring. The ring is surmounted by a glowing globe that simulates the jewel of the ring. As each couple approaches the replica of the ring, the lady dips the midshipman's ring, suspended from a ribbon, into a compass binnacle. The binnacle is filled with water from the Severn River and the seven seas, symbolic of the midshipman's present and future home. The couple then passes through the replica where she places the ring on his finger. It is a moment charged with romance, especially if he presents her with a miniature class ring, regarded as equivalent to an engagement ring. They then kiss and seal the ceremony.

In 1926 an exciting and historical Army-Navy football game took place at Soldier's Field in Chicago. The largest crowd ever to watch a football game—110,000 persons—saw Navy come from behind to tie Army 21-21. Midshipman Tom Hamilton (now Rear Admiral Thomas J. Hamilton, Ret.) was the Navy's hero as he kicked the tying point that gave Navy an undefeated season and a claim to the national title.

In 1930 six midshipmen were awarded Rhodes Scholarships—a record number. In that same year, the Association of American Universities accredited the Academy as a member. Following that, Congress passed a law in 1933 authorizing the Academy to grant bachelor of science degrees to all graduates, beginning with the class of 1931. Subsequently, in 1939 Congress authorized the award of the B.S. degree to all living graduates.

After the entry of the United States into World War II, the Academy accelerated its course of study. The class of 1942 graduated 6 months early in December 1941, and the class of 1943 joined them in the fleet the following June. Throughout the war, the three remaining classes (plebes, youngsters, and finishers) pursued a program that placed greater emphasis on professional and technological courses.

The brilliant role played by Academy graduates in all theaters in World War II forms an indelible page in the nation's and Navy's history.

The ending of World War II caused a minor mishap to one noted landmark in the Academy yard—the Japanese Bell. In 1845 the Regent of Napha, Ryukyu Islands, presented this bell to Commodore Matthew C. Perry during his expedition to Japan. After his death, his widow presented it to the Naval Academy (in 1859) according to his wish. Traditionally, the bell is rung only after a victory over Army in football. An exception to this was made on V-J Day in 1945 when the bell was struck with such enthusiasm that it cracked. Today a replica of the Japanese Bell stands outside Bancroft Hall, the original having been returned to Okinawa in 1987.

Today these traditions and many others remain at the Naval Academy. Plebes still come through the Academy gates in July and do not leave the yard again until the end of August. White-capped midshipmen in dress blue and brass buttons still pass in review on Worden Field, and drum rolls still thunder in the courtyard of Bancroft Hall during meal formations.

Academy graduates continue to distinguish themselves in military roles as well as in public life. President Jimmy Carter (class of 1947) was a successful businessman, a state governor, and the first Academy graduate to hold the highest office in the land.

Along with the continuing traditions at the Naval Academy, exciting changes, academically and physically, reflect the trends and needs of the times. Midshipmen no longer march to classes, just as they are no longer locked into

the same rigid academic pattern. New emphasis on broadening their academic opportunity has expanded the old basic core curriculum into majors ranging from aerospace engineering, to history, to oceanography. A little more than a decade ago, all midshipmen took the same 40 courses. Today's midshipmen can select from more than 500 courses, including political science, languages, and computer science.

The professional changes at Annapolis are also important. Along with the emphasis on broadening the academic curriculum, the Academy provides more intense officer training. Upperclassmen have more of the responsibility for plebe training and for leadership of the entire 4,500-person brigade of midshipmen.

New buildings—modern, yet in harmony with the classic structures from the past—now line the Severn River. The twin towers of the science and mathematics buildings, Michelson and Chauvenet Halls, have been in use since 1971. The 560,000-volume Nimitz Library, dedicated in the fall of 1973, contains complete audiovisual and closed-circuit television facilities. Rickover Hall, the Academy's engineering studies complex, is as extensive a laboratory facility as any in the nation.

On the waterfront rises the Robert Crown Sailing Center, dedicated in April 1974. Built from privately donated funds, the center houses the Intercollegiate Sailing Hall of Fame. It also provides facilities for the Academy's program of varsity and intramural sailing training, Venerable Dahlgren Hall, for years an armory and drill hall, has been converted with private donations into the Midshipman Activity Center. This center contains a hockey-size skating rink, snack bar, and other recreational facilities.

The new Brigade Activity Center, which opened in 1990, can seat the entire brigade. It houses a theater and concert hall and is used for brigade professional programs.

Today's Academy boasts improved facilities along with a sophisticated professional training program to meet the more complex needs of today's nuclear Navy. These improvements and the increased versatility of the academic program and extracurricular activities provide midshipmen with a well-balanced education.

Beginning with the class of 1980, the Academy offered this education to women as well as men. Under a new law passed by Congress, the Naval Academy admitted the first women midshipmen with the plebe class that reported in July 1976.

Instead of the 7 founding professors, the Academy faculty now numbers more than 610. Half of the faculty are naval officers who serve on a rotating basis, bringing fresh thinking from the fleet. The other half are civilians, ensuring continuity and input from the academic community.

Some 50 young men crowded into the old barracks of the 10-acre Fort Severn in 1845 to open the new national Naval School. Now more than 4,500 midshipmen walk the 309 acres of today's Naval Academy.

APPOINTMENT PROCESS

Appointments are granted to applicants to the Naval Academy by either their Congressman or the Vice President. The Vice President and each Congressman may have five of their appointees in the Academy at any one time. They may allocate these on the basis of 1 principal and 9 alternate appointments or award them competitively with 10 applicants vying for each vacancy.

Remaining appointments are strictly competitive and are awarded on the basis of those considered best qualified as set in the Academy's "Whole-Person Evaluation." Competitive appointments are available in the following general classes:

1. Presidential	100 each year to sons and daughters of members of the Regular and Reserve components of the armed services who are on active duty and have served continuously on active duty for at least 8 years; retired personnel; and those who died while in receipt of retired pay
2. Regular Navy and Marine Corps	85 enlisted members per year
3. Naval and Marine Corps Reserve	85 enlisted members per year
4. NROTC students and graduates of honor military and naval schools	20 annually (normally 10 from each category)

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| 5. Deceased and disabled veterans | 40 for the sons and daughters of members of the armed forces who were killed in action or died of, or have a 100 percent disability resulting from, wounds or injuries received or diseases contracted in, or preexisting injury or disease aggravated by, active service |
| 6. District of Columbia | 5 at any one time |
| 7. Virgin Islands, Guam, American Samoa, Puerto Rico, and Canal Zone | 1 at any one time |
| 8. American Republics | 20 at any one time; no more than 3 from any one country |
| 9. Congressionally qualified alternates | The first 150 vacancies of an unfilled class quota for congressionally appointed alternates |

Candidates receiving Vice Presidential and Congressional appointments and those who are children of holders of the Medal of Honor receive direct appointments.

To bring an entering class up to strength, the Secretary of the Navy (SECNAV) may appoint additional nominees. SECNAV appoints these from the remaining qualified alternates and competitors in their order of merit. Three-fourths of these appointments must be filled by congressionally qualified alternates.

By law, a small number of nationals from certain foreign countries may attend. They are not eligible for commissions, but receive the same training and are governed by the same regulations as other students.

Applicants should submit a pre-candidate questionnaire to the Naval Academy in the late spring of their junior year of high school. The Naval Academy will open a pre-admission file upon receipt of this questionnaire and will provide an initial evaluation to the applicant by early summer.

For more information, you may request a pre-candidate questionnaire by writing to the following address:

Director, Candidate Guidance
Code 304
U.S. Naval Academy
Annapolis, MD 21402-5018

ELIGIBILITY CRITERIA FOR APPOINTMENT

In addition to the competitive appointment process, applicants must meet the following eligibility criteria to gain entry to the Naval Academy:

- Be a U.S. citizen
- Be of good moral character
- Be unmarried and have no dependents
- Be at least 17. but not over 22, years of age on 1 July of year entering
- Be physically qualified in accordance with Navy standards
- Have minimum SAT scores of 520 (verbal) and 600 (math); have minimum ACT scores of 25 (English) and 31 (math)

NAVAL RESERVE OFFICER TRAINING CORPS

The Naval Reserve Officer Training Corps (NROTC) Program was founded in 1926. This program produces Navy officers from NROTC units in operation at many colleges and universities throughout the United States. The annual output is approximately 1,500 new officers commissioned mainly in the unrestricted line.

The NROTC Program is highly competitive. It educates and trains qualified young men and women for service as commissioned officers of the Regular Navy and Marine Corps. NROTC midshipmen lead essentially the same campus life as other undergraduates. They make their own arrangements for enrollment and room and board, and they pursue academic studies leading to a bachelor's degree. They may also participate in any extracurricular activities that do not interfere with their NROTC obligations.

ELIGIBILITY REQUIREMENTS

There are currently two major NROTC programs. The first is the Scholarship Program, with 8,000 authorized scholarships. It provides for tuition, books, instructional fees, and a \$100-per-month subsistence allowance during the academic year for a maximum of 40 academic months. Scholarship students incur a service obligation at the end of their sophomore year. Students incur a 4-year active-duty obligation upon commissioning.

The second program is called the College Program. Although this program has no enrollment limit, it averages between 2,000 and 3,000 students annually. The program pays a \$100-per-month subsistence allowance during the junior and senior year of college. Students must serve 3 years of active duty upon commissioning.

Applicants for both programs must meet the following eligibility requirements:

- Be a U.S. citizen
- Be accepted for admission as a civilian student to one of the NROTC participating colleges or universities
- Be at least 17 years of age, but have not reached 27 1/2 by 30 June of the year of college graduation
- Be physically qualified in accordance with Navy standards
- Be of good moral character
- Have minimum SAT scores of 450 (verbal) and 500 (math); have ACT scores of 19 (English) and 23 (math)

NROTC ORGANIZATION

The NROTC organization of a college or university is centered in a Department of Naval Science. A Navy captain or Marine Corps colonel with the title of Professor of Naval Science normally heads the NROTC organization. The instructors, Navy and Marine Corps officers, hold academic ranks as assistant professors. The officers selected for this important duty must possess academic ability and have diversified duty experience. Their experience adds to the store of academic knowledge that they impart to the midshipmen. It also provides a realistic

framework from which they can instill in their students a highly motivated interest in the naval service.

Normally, the Navy instructors teach eight naval professional courses and provide weekly laboratory periods for practical work in these courses. In early fall and late spring, instructors use this lab time for close-order drill.

Future Marine Corps officers make their choice between the Navy or the Marine Corps during the first 2 years. For the last 2 years, their program of instruction and training differs from that given prospective Navy officers.

NROTC scholarship students may select, with the approval of academic authorities, a field of study leading to a baccalaureate degree, subject to certain limitations. Exempted as majors, for example, are studies in such academic fields as music, theology, and others deemed of limited value to naval officers.

The Navy requires that midshipmen acquire a background in physics and mathematics and a general proficiency in written and oral expression. Students are encouraged to participate in any of the school's extracurricular activities as long as they do not conflict with Navy classes and drills.

NROTC midshipmen have about the same summer cruise obligations as their contemporaries from the Naval Academy.

OFFICER CANDIDATE SCHOOL

Officer Candidate School (OCS) was founded in 1951 at Newport, Rhode Island, in response to an increased demand for naval officers during the Korean conflict. OCS continues today as a major source of recruitment of male and female officers for the United States Navy. It provides college graduates from the civilian and Navy enlisted communities an opportunity for a naval commission.

"Leadership is our most important product" stands as the motto of OCS. The school places officer candidates in positions of responsibility and closely evaluates their leadership potential in addition to academics. The pace of OCS is strenuous and demanding. In 16 weeks, officer candidates must complete a highly concentrated course in the fundamentals of naval science. Naval science subjects studied include seamanship, navigation, naval engineering, naval warfare, military justice, and principles of leadership. Additionally, students weekly participate in 6 hours of physical training activities.

To reenforce principles learned in the classroom, the school requires students to engage in "hands-on" training. This includes underway experience on yard-patrol craft and time in mock-ups of ship's bridges and combat information centers. It also includes training on the USS Buttercup, a damage control trainer that simulates a sinking ship.

Upon successful completion of the course of instruction, officer candidates receive a commission as an ensign in the United States Naval Reserve. They then serve 4 years on active duty and 2 years in an inactive Reserve status. The top 10 percent of each graduating class receive recognition as distinguished naval graduates and are offered a Regular U.S. Navy commission.

AVIATION OFFICER CANDIDATE SCHOOL

The Navy began the Aviation Officer Candidate School (AOCS) Program in 1955. It provides an avenue to commissioned service for applicants interested in serving as naval aviators, naval flight officers, intelligence officers, or aviation maintenance duty officers.

Candidates selected for AOCS attend 14 weeks of indoctrination training at Pensacola, Florida. Subjects of instruction include seamanship, organizational operations, naval administration, sea power, military law, naval leadership, aeronautics, engineering, and navigation. Upon successful completion they receive their commissions as ensigns.

Members desiring pilot training continue their flight training for 12 to 18 months after commissioning. Following successful completion of the additional flight training, candidates are designated naval aviators and accept a 7-year active-duty obligation.

Naval flight officer (NFO) candidates, after commissioning, will continue their training leading to designation as NFOs. NFOs incur a 6-year active-duty obligation following their designation.

Candidates selected for the intelligence program and the aviation maintenance duty officer program undergo additional training following commissioning. They must serve on active duty for 4 years from their date of commissioning.

NAVAL POSTGRADUATE SCHOOL

The Naval Postgraduate School (NPS) was officially established at Monterey, California, in

1951, although the original postgraduate school dates back to the early 1900s.

The current total educational emphasis of this school is on graduate-level programs; the school meets 80 percent of the Navy's graduate education requirement. NPS has over 40 programs of study, ranging from the traditional engineering and physical sciences to the rapidly evolving space science programs. No other university offers Navy-oriented graduate curricula with such a broad span of topics. Studies include aircraft combat survivability, fiber optics, robotics, artificial intelligence, data base systems, and light weight satellites.

Lieutenant and lieutenant commander selection boards screen officers for NPS. The boards also determine the officers' areas of study, based on the officers' designators and academic profile codes. Potential NPS students discuss with their detailers how the school can fit into their careers and whether or not they wish to attend.

NPS is accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges.

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

The Uniformed Services University of the Health Sciences was established to educate career-oriented medical officers for the military services. The university currently incorporates the F. Edward Hebert School of Medicine graduate and continuing education programs. It is located on the Naval Medical Command Reservation in Bethesda, Maryland.

A faculty committee on admissions makes student selections. The committee bases its selections upon candidates' motivation and dedication to a career in the uniformed services and an overall appraisal of their personal and intellectual characteristics. Applicants must be U.S. citizens and meet the physical and personal qualifications for commissioning. They also must give evidence of a strong commitment to serving as a uniformed medical officer. The graduating medical student must serve a period of obligation of not less than 7 years.

The university's F. Edward Hebert School of Medicine now has an enrollment of over 600 officers in training for their M.D. degrees. It has an additional enrollment of over 100



134.130

Figure 10-2.-One of the foremost seaman of his day, Rear Admiral Lute was the driving influence behind the institution of the U.S. Naval War College in 1884 and the use of fleet exercises as battle practice for our expanding naval armada.

individuals in one of its basic sciences graduate programs.

The university's fully accredited graduate program is available to both civilian and military applicants. Graduates may receive the Ph.D. degree in one of the biomedical sciences, the master of public health degree, or the master of tropical medicine and hygiene degree. In addition, the university serves as the focus for a vigorous continuing medical education program that supports the military services. The university offers unique training opportunities both at the Bethesda campus and at military bases around the world, where such training is otherwise unavailable.

NAVAL WAR COLLEGE

The Naval War College was established to provide military officers a chance to study their profession in mid-career, much as many civilian professionals frequently do. The mission of the Naval War College is to enhance the professional capabilities of its students. It helps students in both command and management positions increase their ability to make sound decisions. It also helps them to conduct research leading to the development of advanced strategic and tactical concepts for the future employment of naval forces. The Naval War College was established on 6 October 1884 by order of the Secretary of the Navy. Rear Admiral Stephen B. Lute (fig. 10-2)



109.16

Figure 10-3.-The U.S. Naval War College, Newport, Rhode Island.

was appointed as the first president of the Naval War College in Newport, Rhode Island (fig. 10-3).

Lute's conception of the nature and needs of the naval profession shaped the War College from its start. He appreciated the interrelationship of naval power, technology, and international politics and the need for senior officers to understand such complex issues. Lute organized the War College as a place of original research on all questions about war, the statesmanship connected with war, or the prevention of war.

Lute's original format has carried through over the years. Over the last 100 years, the Naval War College has shaped its educational requirements to meet the professional and environmental needs of the Navy.

SUMMARY

We live in a volatile and complex world in which sudden and unexpected changes in world leadership frequently occur. In addition, technological innovations frequently occur in computer science, artificial intelligence, and robotics. The Navy must have the ability to apply

new technologies and to respond quickly to new challenges. The Navy must also be able to develop sound national and international policy and efficiently manage its limited resources. In short, it must be able to convert invention into combat readiness. This requires an educated officer corps with the intellect and vision to capitalize on evolving technology and developments. The various naval educational institutions discussed in this chapter help to provide the trained and educated professionals required to fill these needs.

REFERENCES

Navy Fact File, 8th ed., Office of Information, Washington, D.C., 1988.

"Paths to a Commission," *All Hands*, Number 863 (February 1989): 42-47.

The United States Government Manual 1989/90, Office of the Federal Register, National Archives and Records Administration, Washington, D.C., 1989.

MIND YOUR Ps AND Qs

THERE ARE FEW OF US WHO HAVE NOT AT ONE TIME OR ANOTHER BEEN ADMONISHED TO "MIND OUR Ps AND Qs," OR IN OTHER WORDS, TO BEHAVE OUR BEST. ODDLY ENOUGH, "MIND YOUR Ps AND Qs" HAD NAUTICAL BEGINNINGS AS A METHOD OF KEEPING BOOKS ON THE WATERFRONT.

IN THE DAYS OF SAIL WHEN SAILORS WERE PAID PITTANCE, SEAMEN DRANK THEIR ALE IN TAVERNS WHOSE KEEPERS WERE WILLING TO EXTEND CREDIT UNTIL PAYDAY. SINCE MANY SALTS WERE ILLITERATE, KEEPERS KEPT A TALLY OF PINTS AND QUARTS CONSUMED BY EACH SAILOR ON A CHALKBOARD BEHIND THE BAR. NEXT TO EACH PERSON'S NAME, A MARK WAS MADE UNDER "P" FOR PINT OR "Q" FOR QUART WHENEVER A SEAMAN ORDERED ANOTHER DRAUGHT.

ON PAYDAY, EACH SEAMAN WAS LIABLE FOR EACH MARK NEXT TO HIS NAME, SO HE WAS FORCED TO "MIND HIS Ps AND Qs" OR GET INTO FINANCIAL TROUBLE. TO ENSURE AN ACCURATE COUNT BY UNSCRUPULOUS KEEPERS, SAILORS HAD TO KEEP THEIR WITS AND REMAIN SOMEWHAT SOBER. SOBRIETY USUALLY ENSURED GOOD BEHAVIOR; HENCE, THE MEANING OF "MIND YOUR Ps AND Qs."



